

Physical Science 102 – 51E
Spring 2008

Monday & Wednesday
6:00 p.m. to 7:15 p.m.
Garrett 220

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Welcome to Physical Science 102! Physical Science 102 is the second half of an introductory physical science course. Topics covered in this course include magnetism, waves, light, the atomic model of matter, the solar system, stars, and Special and General Relativity.

The goals of this course include:

- A functional understanding Faraday's Law and the principle of electromagnetic induction.
- An ability to distinguish between longitudinal and transverse waves along with interference of waves.
- A functional understanding of the basic properties of light and color.
- An ability to apply the atomic model of matter to real world experiences.
- An ability to correctly identify the relationship of the quantum theory to microscopic and macroscopic systems.
- A basic knowledge of our Solar Systems and the properties of stars.
- A familiarity with the theory of Special and General Relativity.
- An ability to apply scientific reasoning skills in familiar as well as unfamiliar contexts.
- A familiarity with the operational (procedural) definitions of the major terms in physics and the ability to utilize these definitions to communicate effectively about the subject matter.

Textbook: Conceptual Physical Science, 3rd edition by Hewitt, Suchocki, & Hewitt.

Grading:

Tests (4)	20% each	} 80%
Daily Work/Homework	20%	
Final		
<hr/> TOTAL		100%

As the table above shows, 80% of your grade is based on five scores (four tests and the Daily Work/Homework grade). The lowest of these five scores will be dropped. If you do well on every exam but do not turn in homework (NOT RECOMMENDED), 80% of your grade will be based on your test scores only. On the other hand, if you turn in homework, but you “bomb” one of the tests that test score will be dropped and 80% of your grade will be based on 3 tests and the Daily Work/Homework grade. Note that the Final will NOT be dropped.

You will not receive credit for activities that occur during classtime unless you are present, even if the university excuses the absence. Excused absences can be made-up if you make arrangements with me soon after your return to class. Otherwise, no make-up is possible. It is important that you attend class every period. Role is taken at the beginning of each class period, so it important that you arrive on-time. If you arrive late, it is your responsibility to remind the instructor to mark you present. At the discretion of the instructor, the accumulation of several (i.e. 4) “lates” may result in a penalty of up to 10% on the next or current exam.

It is extremely important that you turn in all homework assignments even if you are unable to figure out how to completely solve the assigned problems. Significant partial credit will be awarded whenever you demonstrate reasonable effort. Zero (0) credit will be assigned if you fail to turn in an assignment. A zero (0) grade will lower your overall homework grade significantly.

University Attendance Policy

The right hand column of page 9 in the 2007–2008 Student Policy Manual and Organizational Handbook states the following:

2. Any student who is not present for at least 75% of the scheduled class sessions in any course may receive a grade of W if this condition occurs prior to the last day to drop a course or a grade of F after that date.
3. Any University-related activity requiring an absence from class will count as an absence when determining if a student has attended 75% of class meetings.

Therefore, you may miss a total of six (6) class meetings and still meet the absence requirements. The seventh (7th) absence will require that you drop (i.e. W) or receive an F for the course.

Blackboard

Materials such as daily assignments, homework and exam scores, and other miscellaneous announcements for this course will be posted on Blackboard.

Mid-term Grades

Mid-term grades will be posted on Arrow from March 3rd through March 7th. Mid-term grades indicate a student's status at mid-semester and do not indicate the final performance outcome of a student.

Make-up Tests

If a student misses an exam due to an excused absence, the student must present a copy of the documentation as soon as possible, preferably by the next class meeting. If you miss an exam, you must call the day of the missed exam. If a message is left, then a phone number where you may be reached must be made available to the instructor. If a student misses a test due to an unexcused absence, the student will receive a zero (0) on the test. All make-up work will be taken preferably before the next class or at a prearranged time set by the instructor. Anyone who misses an exam due to a university excused absence will need to take the exam at a prearranged time with the instructor before they return back to class or otherwise take the make-up at the end of the semester.

Emergency Procedure

Please check the evacuation chart in the classroom for the shortest path out of the building in the event of an emergency. Also, please inform me if you will need extra assistance in the event that we have to evacuate the building. Please do not use the elevator when evacuating.

Academic Integrity

Faculty and students must observe the ULM published policy on Academic Dishonesty (see Page 4 in *ULM Student Policy Manual* -- <http://www.ulm.edu/studentpolicy/>).

Course Evaluation Policy

Students are expected to complete the on-line course evaluation. This link will be available on your Blackboard account towards the end of the semester.

Student Services

Information about ULM student services, such as Student Success Center (<http://www.ulm.edu/cass/>), Counseling Center (<http://www.ulm.edu/counselingcenter/>), Special Needs (<http://www.ulm.edu/counselingcenter/special.htm>), and Student Health Services, is available at the following Student Services web site <http://www.ulm.edu/studentaffairs/>.

Modes of Instruction

Collaborating effectively with your classmates is an emphasis of this course. Most class periods will involve mini-lectures interspersed with short in-class activities. These activities are designed to help you recognize your own preconceptions and practice using scientific reasoning in an environment where you can correct errors immediately. You will be expected to share your ideas within a small group of your classmates and to listen to the ideas of others.

Help Outside of Class

I will be available during my office hours listed below about 95% of the time. I am available at other times as well. Feel free to stop by at any time. Also, I encourage you to seek out classmates when you need help and to make yourself available for any questions they may have. In particular, please seek out your classmates before asking for my help during office hours in the event that you missed class.

Office Hours

Monday & Wednesday: 1:00 p.m. – 3:00 p.m.
Tuesday: 9:00 a.m. – 11:00 a.m. & 2:00 p.m. – 4:00 p.m.
Friday: 9:00 a.m. – 10:00 a.m. & 11:00 a.m. – 12 Noon

When I am not in a class, I am generally on the first floor of Hanna Hall. Drop in visits are welcome. If possible, however, make an appointment to see me so that I am certain to be available.

Note

No tobacco, drinks, or food are permitted in the classroom. Grades will not be given out over the telephone. Students are asked to turn off any personal electronic devices such as cellular phones, beepers, mp3 players, video games, etc. At the discretion of the instructor, each instance of class disruption related to these types of devices may result in a penalty of up to 10% on the next or current exam. Also, the Instructor reserves the right to change a student's seat assignment. Graduating seniors are not exempt from anything. Each student is responsible for all material and assignments covered in class whether or not the student is in class.

Drop Date

The final day to withdraw from this class (**with a “W”**) is Wednesday, April 2, 2008.

Grading Scale

- $90 \leq \mathbf{A} \leq 100$
- $80 \leq \mathbf{B} < 90$
- $70 \leq \mathbf{C} < 80$
- $60 \leq \mathbf{D} < 70$
- $\mathbf{F} < 60$